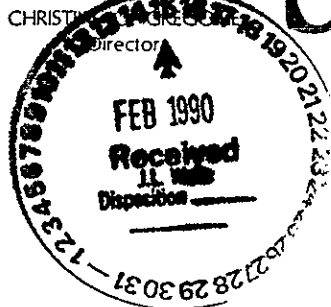


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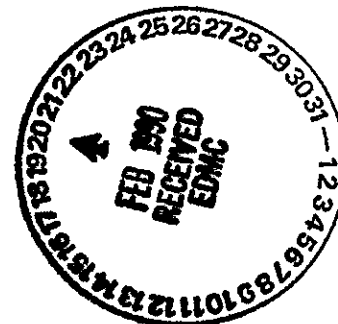


STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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February 9, 1990

Mr. Steven H. Wisness
Hanford Project Manager
U.S. Department of Energy
P.O. Box 550
Richland, Washington 99352



Dear Mr. Wisness:

This letter is in response to your letter of January 11, 1990 concerning "ACUTE ORAL RAT TOXICITY TESTING OF SIMULATED HIGH-LEVEL SLURRY."

Results of acute oral rat toxicity tests on grouted PWO slurry indicate that the treated material no longer exhibits the criteria of toxicity as defined by section 173-303-101(5) WAC of the state dangerous waste regulations. These test results, and test results presented earlier in Treatment of Excess Process Chemicals (PNL-6915), indicate that grouted PWO should be redesignated as non-dangerous. However, recently acquired information on suspected leaks from the grouted waste drums indicates that additional work is required to verify that the grouting process has adequately stabilized toxic constituents in simulated high-level waste slurry.

During a January 10, 1990 review of inspection logs from the simulated high-level waste slurry site, Ecology staff observed that several drums of PWO waste are suspected of having leaked since grouting. Analysis of the leaked material indicates the presence of waste constituents (e.g., cerium, molybdenum, zirconium, and barium). The quantity of leaked material is small (e.g. 10 - 100 mL), but any amount of leakage from ostensibly stabilized waste is cause for concern.

To resolve these concerns, USDOE/PNL should do the following:

- o All grouted simulated high-level waste slurry drums should be externally inspected for signs of leakage.
- o Any drums found to be leaking should be opened and inspected for free liquids. The amount of free liquid in each drum should be measured.
- o If more than 250 mL of free liquid is found in any drum, that liquid should be removed and analyzed for EP toxic metals, pH, molybdenum, zirconium, cerium, and sodium.
- o USDOE/PNL should submit results of these inspections and analyses (including results from any analysis of leaks previously discovered) to Ecology.

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All drums of grouted simulated high-level waste slurry (consisting of PW0 and grouted residues from their treatment) should remain at the 1234 laydown yard pending completion of the aforementioned inspections and analyses, and final approval for disposal by Ecology.

Please extend my thanks to staff of USDOE and PNL for their assistance in our review of waste characterization reports for the simulated high-level waste slurry unit. Technical inquiries regarding this letter should be directed to Mike Gordon at (206)438-7024.

Sincerely,

A handwritten signature in cursive script, appearing to read "Roger Stanley", with a long horizontal flourish extending to the right.

Roger Stanley
Hanford Project Manager

cc: Paul Day
Jack Waite
Wayne Slater

DISTRIBUTION COVERSHEET

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